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| APPLICATION NO.                       | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO |  |
|---------------------------------------|-----------------|----------------------|-------------------------|-----------------|--|
| 10/022,055                            | 12/18/2001      | Shu-Woei Chiou       | A34893                  | 1991            |  |
| 21003                                 | 7590 10/17/2003 |                      | EXAM                    | EXAMINER        |  |
| BAKER & BOTTS<br>30 ROCKEFELLER PLAZA |                 |                      | CRANE, SARA W           |                 |  |
| NEW YORK,                             |                 |                      | . ART UNIT              | PAPER NUMBER    |  |
|                                       |                 |                      | 2811                    |                 |  |
|                                       |                 |                      | DATE MAILED: 10/17/2003 |                 |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                                 | em   |  |  |  |  |
|---|---------------------------------|--|--|--|--|--|
|   | Application No.                 | Applicant(s)   |  |  |  |  |
|   | 10/022,055                      | CHIOU ET AL.   |  |  |  |  |
| Office Action Summary   | Examiner                        | Art Unit   |  |  |  |  |
|   | Sara W. Crane                   | 2811   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspond nce address Period for Reply  |                                 |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                                 |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 2  | 24 July 2003 .                  |  |  |  |  |  |
| 2a)⊠ This action is <b>FINAL</b> . 2b)□   | This action is non-final.       |  |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  |                                 |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the applicat   | tion                            |  |  |  |  |  |
| 4a) Of the above claim(s) <u>9-16</u> is/are withdrawn from consideration.  |                                 |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                                 |  |  |  |  |  |
|   |                                 |  |  |  |  |  |
|   |                                 |  |  |  |  |  |
|   | 7) Claim(s) is/are objected to. |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers   |                                 |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examiner.   |                                 |  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |                                 |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                                 |  |  |  |  |  |
| 11)☐ The proposed drawing correction filed on   | is: a)□ approved b)□ disappro   | oved by the Examiner.                                    |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                                 |  |  |  |  |  |
| 12)☐ The oath or declaration is objected to by the Examiner.  |                                 |  |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                                 |  |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                                 |  |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                                 |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |                                 |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                                 |  |  |  |  |  |
| <ul> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |                                 |  |  |  |  |  |
| 14)☐ Acknowledgment is made of a claim for dome   | ·                               |  |  |  |  |  |
| a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.   |                                 |  |  |  |  |  |
| Attachment(s)   |                                 |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 5) Notice of Informal           | ry (PTO-413) Paper No(s)<br>Patent Application (PTO-152) |  |  |  |  |
| U.S. Patent and Trademark Office PTOL-326 (Rev. 04-01) Office   | e Action Summary                | Part of Paper No. 7                                      |  |  |  |  |

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-8 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 17, as amended, each recite "a plurality of oxidizable semiconductor layers, wherein each of said plurality of oxidizable semiconductor layer is oxidized . . . . " It is not clear how a semiconductor layer can be both "oxidizable" and "oxidized" at the same time. Examiner understands "oxidizable" to mean "capable of being oxidized." Examiner understands "oxidized" to mean "already oxidized." A material that is already oxidized is no longer capable of being oxidized, because it no longer has the capacity to enter into a chemical reaction with oxygen. For example, a metal such as aluminum is oxidizable, because it can enter into a chemical reaction with oxygen, to form aluminum oxide. Aluminum oxide is *not* oxidizable, because it does not enter into a chemical reaction with oxygen. The claim language requiring a single semiconductor layer to have both properties simultaneously is unclear, and does not appear to correspond to any teaching disclosed in the specification. The claims appear to be attempting to claim an intermediate structure and a final structure at the same time.

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## Conclusion

Applicant's arguments with respect to the pending claims have been considered but are most in view of the new ground(s) of rejection. As noted above, it is not clear whether the claim is drawn to an intermediate structure, prior to oxidation, or to a final structure, after oxidation.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Crane, whose telephone number is (703) 308-4894.

The fax phone number for this Group is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

Sara W. Crane Primary Examiner Art Unit 2811